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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,236	02/02/2002	Terence Chee Sung Chang	85447.000090	2772

23387 7590 04/23/2003

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EXAMINER

WILLIAMS, KEVIN D

ART UNIT PAPER NUMBER

2854

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/066,236

Applicant(s)

CHANG ET AL.

Examiner

Kevin D. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the illuminator must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 4 and 10 are objected to because of the following informalities:

In claim 4, line 1, the phrase "setting the adjustable drive is a stepper motor" is awkward.

In claim 10, line, the phrase "adjustable component comprises is" is awkward. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 17 and 20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as

to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 17 and 20 recite an illuminator for illuminating a fiducial mark and an intensity of illumination that is adjustable. The specification does not describe the process of illuminating the fiducial mark or the process of adjusting the intensity of the illumination in a manner such that one of ordinary skill in the art would understand what provides the illumination, how the intensity is modified, and how the illumination and the intensity of the illumination work in cooperation with the printer, the cutter, and the fiducial mark to provide for an accurate cutting mark. The specification does not describe the process of illuminating and how this process works in conjunction with the cutting process such that one of ordinary skill could make or use the invention.

The examiner is unable to ascertain the scope of claims 17 and 20, therefore prior art will not be applied.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 6-9, 11-15, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Durr (US 5,452,632).

Durr teaches a method for calibrating at least one adjustable drive of a cutter comprising setting the adjustable drive of the cutter to a first setting (initial setting), printing a calibration print 2 with the image printer, moving the calibration print with the adjustable drive 12 of the cutter, comparing a chosen feature of the calibration print to the distance that the print is moved by the adjustable drive (co. 5, lines 1-9), deriving an input signal representative of the difference between the chosen feature and the distance that the calibration print is moved by the adjustable drive (co. 5, lines 1-9), the adjustable drive being a motor 12, a knife 11, correcting the adjustable drive responsive to the input signal (co. 5, lines 1-9), where the chosen feature in the cut length (co. 5, lines 1-7), correcting the adjustable drive comprises changing the distance the motor advances the calibration print for cutting the calibration print, the calibration print includes a pair of spaced fiducial marks (col. 4, lines 46-55), a plurality of staggered fiducial marks (col. 4, lines 46-55), the chosen distance being the distance between the marks, cutting the print adjacent one of the fiducial marks, the chosen feature being the fiducial mark closest to the cut edge, scanning 9,14 the calibration print and measuring a feature of the calibration print that is affected by the setting of the adjustable component, where adjusting the component comprises setting a stored value in a controller operating the cutter, where scanning the print involves measuring the cut length of the calibration print and adjusting the component in response to the measured cut length, said scanning measures the intensity (col. 4, lines 64-67) of the fiducial mark and adjusting the component comprises setting a fiducial sensor to produce a predetermined output, said adjusting comprises adjusting the drive so the linear

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distance the drive moves the print corresponds to the distance between the fiducial marks, and the adjustable drive advancing the print a preselected distance.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-5, 10, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Durr in view of Staamann (US 3,808,971).

Durr teaches the claimed invention but does not provide a discussion of the particular type of motor used and therefore does not teach the stepper motor.

Staamann teaches a stepper motor 34 for adjusting the rotational movement of a device. Staamann teaches the use of a step motor for providing precise rotational adjustments.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Durr to have the step motor as taught by Staamann in order to more accurately and precisely adjust the cutter drive as taught by Staamann.

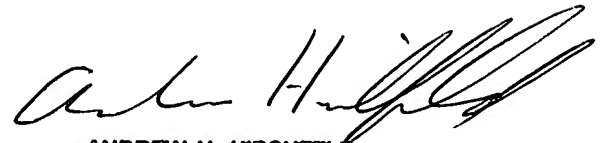
***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (703) 305-3036. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KDW  
April 21, 2003



ANDREW H. HIRSHFELD  
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